# General Lab Manual

The **purpose** of this document is to provide a general template for a lab manual that each lab could modify to reflect the lab-specific culture and expectations for all lab members.

The written parts for each section serve as an example, and should be modified to match the specific policies and expectations of the lab.

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# I. General Policies

## Safety

Safety is the first and foremost priority. If there is a serious emergency such as a fire, injury, etc., call 911. Then immediately call <u>campus police</u> (604) 822-2222 and <u>the PI</u>. A complete list of contact info of all lab members can be found <u>here</u>. Any safety concern should be brought up to the PI right away.

# Covid-19 safety protocols

- All new lab members are expected to be fully vaccinated against SARS-CoV2 prior to starting in the lab. All lab members are also expected to comply with masking guidance as directed by UBC, and/or the province.
- Please perform daily self-assessments prior to coming into lab. If you are experiencing symptoms, please stay at home and/or get tested.
- Currently, all lab members are expected to log in hours in LSI in the lab Calendar for potential contact tracing purposes.

## **Code of Conduct**

All members are expected to help ensure a safe work environment for everybody. The lab is dedicated to providing a harassment-free experience for everyone, regardless of gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, or religion (or lack thereof). Harassment of lab members in any form can lead to termination of employment.

Harassment includes offensive verbal comments related to gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, religion, sexual images in public spaces, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome sexual attention. Please note that work-related discussions of, e.g. animal reproduction are appropriate.

## Research Integrity

- We expect lab members to be honest in scientific communications both within and outside the lab.
- We expect that lab members will design experiments in a manner that minimizes both bias and selfdeception.
- We expect that lab members will keep agreements, be careful, and share their code and results openly with the scientific community.
- We expect that credit will be given where credit is due, including in scientific writing. Plagiarism is not tolerated, and it is your responsibility to know the definition and scope of plagiarism.
- It is never okay to tamper with data, make up data, omit data, or fudge results in any way. Research misconduct is completely unacceptable and is subject to termination of employment.

# **Dealing with conflicts**

- Interpersonal conflicts with other lab members should be reported to the PI immediately.
- Conflicts with the PI can be directed to the Director of the Graduate Program in Neuroscience (currently Miriam Spering, miriam.spering@ubc.ca) or the Head of your department or unit (currently [Name]).
- UBC Graduate and Postdoctoral Studies have formalized conflict resolution process and resources are available in this site: https://www.grad.ubc.ca/current-students/managing-your-program/conflictresolution
- Equity & Inclusion Office is committed to ensuring that UBC is a community in which human rights are respected and equity and diversity are integral to university life. They offer resources for handling complaints regarding discrimination and harassment.
- <u>Graduate Student Society (GSS) Advocacy</u>: The GSS Advocates are graduate students who provide confidential assistance to fellow individual graduate students experiencing difficulties with their

- supervisors, advisors, program, faculty or the University.
- Office of the Ombudsperson for Students works with UBC community members to ensure students are treated fairly and can learn, work and live in a fair, equitable and respectful environment. Reporting to the President, the office is an independent, impartial and confidential resource for students at UBC, jointly funded by the AMS, GSS, and UBC.

# II. Daily lab operations

# **Lab** Hours

The Lab does not institute fixed work hours. However, most research activities and interactions occur during core hours (10–4) on weekdays. Staff members are expected to work 40 hours per week and have consistent work hours on weekdays.

All new members are expected to first start with a 9–5 schedule. Eventually, you may find that your schedule becomes more dependent on the demands of your experiments, and after some time and independence, this schedule can be modified to suit your working style.

The lab observes all UBC statutory holidays. We will not have lab meetings and individual meetings in the two weeks surrounding Dec 25 - Jan 1.

## **Lab Meetings**

Everyone is expected to attend our weekly lab meetings.

Graduate students, postdocs, and visiting scholars are expected to present at lab meetings on a regular basis. We encourage undergraduate students and technical staff to present.

# <mark>Ind</mark>ividual Meetings

- 1:1 meetings. Every graduate student and postdoc will meet with the PI on a 1:1 basis once a week at a pre-determined schedule. These meetings can also be used to discuss career plans and research progress. Prior to 1:1s, lab members will fill up a meeting agenda that covers 1) recent progress, 2) plans for next week, and 3) other items for discussion
- Training plan. All graduate students will have an individual training or career development plan that will be reviewed with the PI twice a year.

### Absences

- Unplanned day absences. Notify the PI of any unplanned day absences as soon as possible. It's the lab member's responsibility to arrange help with others in the lab in case of ongoing experiments.
- Vacations. Lab members are entitled to two weeks of paid vacation. Permanent staff can accumulate more vacation days according to UBC policies.
- Medical and Parental leave. These will be arranged with the help of department administration. Lab members are expected to notify the PI as soon as possible to arrange for long term project management.

# III. Communication

## Open door policy

The PI maintains an open door policy. When the PI's door is closed, it means they are unavailable at that time for drop in meeting.

## Slack

Almost all lab communication within the group and with PI is handled through Slack.

During normal work times (M-F 9-5), all lab members are expected to respond promptly to Slack messages from the PI. You may receive messages from PI during off-work times, but responses are not expected until normal work times.

## Email, phone calls and texting

Lab members are encouraged instead to use Slack as primary means of communications. Email can be used for official documentation or other official business.

Phone calls will be limited to emergency use only. If there are problems with Slack, texting will be an alternate means of contact.

#### Social Media

Lab members are encouraged to communicate about their research through public social media, such as Twitter. If you choose to do so then you are expected to follow our code of conduct in any accounts that reflect your professional persona.

Other social media are more personal and private (Facebook, Instagram, Tik Tok, etc). Lab members are expected to respect others' wishes on whether to keep personal social media more private.

# IV. Employment and Expenses

# **Sal**ary

- Salary is commensurate with level of experience. Salary increase will occur on a yearly basis to account for yearly inflation (currently set by UBC at 2.5%).
- Stipends. Graduate students will receive the current minimum stipend of \$22,500 for Masters and \$26,000 for PhD students, as determined by the Graduate Program in Neuroscience.
- Fellowship and Awards Top-up. Graduate students receiving a fellowship will receive a top up of \$3,000 per year of their fellowship, or the minimum stipend, whichever is more. Postdocs with fellowships will receive a top up of \$5,000 per year of their fellowship.
- Equal pay will be observed for all genders.

## **Visas and Immigration**

The Lab supports the training of international students and postdocs and will negotiate with individual trainees to support appropriate visa applications as needed. Trainees requiring such visas are responsible for monitoring the deadlines of their visas

## **Relocation Expenses**

As moving expenses cannot be covered by grants, the lab does not have a mechanism to cover relocation expenses.

## **Travel Expenses**

If the PI approves your attendance to a scientific meeting, the lab will pay for you to go including travel, accommodation, registration, and poster printing. You pay for all conference expenses up front and then get reimbursed after you attend the conference. Keep itemized receipts for EVERYTHING. Request reimbursements within one month from returning from travel. Trainees are expected to apply for travel awards when possible. Note that in addition to the G+PS and the GPN, your research centre or institute might also offer travel awards.

### Leaving the Lab

To ensure a smooth transition, please let the PI know as soon as possible when you will be moving on. When you leave the lab, we expect you to clean out your old possessions and expired reagents/samples. Please make sure you organize your lab notebooks, reagents, and data so that others can follow your work. You must discuss a plan for changing project ownership and manuscript authorship with the PI. We may also want you to train a successor before you leave the lab. Please remember to return keys to the lab.

# V. Data Management

#### Lab Data

- Data storage. Each lab member should back up raw data as well as the metadata (see below) needed to reproduce all processing/analyses. Lab data should be stored in at least two of the following places: 1) local hard drive, 2) external hard drive, and 3) lab drive.
- Raw data. You should not manipulate master datasets. Please make a local copy on your computer and work off from that. Your experimental notes and analysis codes are a crucial resource for the lab. They must be available upon request and usable for verifying data in any publication, should questions arise.
- Leaving the lab. Before you leave the lab for good, or upon completion of a project, you must archive
  old datasets and back them up.

#### Lab notebook

- All lab members conducting experiments should have a lab notebook, either physical or electronic. The
  important thing is that you are keeping detailed notes and they are in an organized fashion.
- Your notebooks should stay in the lab. If you will need information from your notebooks while working from home, take pictures or photocopies.
- Turn in your notebooks to the lab before you leave the lab for good (see Leaving the Lab).

## **Data sharing**

- Sharing within lab. All lab members are expected to share their code and data with others in the lab when asked.
- Outside the lab. Prior to publication, sharing data outside the lab will occur upon PI discretion. This
  gives us an opportunity to work with the data to meet our needs (including grant needs!) before
  releasing it for other people to use. Generally, we will try to make our data and code publicly available
  within one year of publishing the results.
- Preprints. We will also share our work with the world as soon as we ready, which means preprints! The
  lab policy is to upload a preprint of a manuscript simultaneously with initial submission to a journal. The
  preferred preprint servers are bioRxiv. We have not been putting PDFs of all our papers on the lab
  website, but you are more than welcome to share PDFs of your preprints or published papers with
  whoever asks.

# VI. Authorship

## **Arrangements and Expectations**

- Lead authorship. Leadauthor(s) should be responsible for the bulk of the data acquisition, analysis, figure preparation (see <u>Figure style guide</u>), and writing (cover letter, main text, figure legends, and response to reviewers).
  - While the first author is expected to shepherd the paper to completion, it may not be possible for one person to oversee the whole project. If the original lead author must step down, a replacement will have to be assigned or elected.
- Co-authorship. Co-authors are expected to contribute scientifically and participate actively in helping
  the leading author in the writing, editing, and proofing of the manuscript at all stages. While we
  generally err on the side of generosity, gift authorship will not be considered.
- Authorship will be discussed on the outset and throughout project development. Negotiation of authorship (both inclusion and order) should be open, professional, and respectful. Any changes in authorship should be approved by all the original authors. If you need clarification on authorship issues, please talk to the PI. Anyone who fails to fulfill the minimal requirements (see Necessary but Insufficient) will be taken off the author list.

## **Examples of Authorship Assignments**

- Deciding: Collection of vital data (e.g. key and initial observations, traces/images for figures), conceptualizing, designing, and refining research, provision of resources necessary for the study.
- Sufficient: the conception of the study, processing and interpretation of data, designs of the study, provision of specialized expertise, novel reagents and analyses.
- Necessary but Insufficient: discussing the results and implications, reviewing, editing, and critiquing the manuscript at all stages, final approval of the version to be submitted/published.
- Insufficient: technical services, editorial assistance, formatting of manuscript, preparation of research result (e.g. figures), performing basic statistical analyses, literature search, general training/supervision of junior researchers, gifting of store-bought reagents.

# VII. Specific Expectations

### Pl's commitment

- At the beginning of your time in the lab, you and I will discuss your career goals and carve a project tailored to your interests and goals. I will help you refine your project to achieve clear actionable targets and to develop a project timeline. I will provide scientific, infrastructural, and financial support for you to accomplish your goals. And if I am unable to help with a critical component of your project, I will connect you with experts in the field that can provide the necessary support.
- If appropriate, I will help you to seek external funding opportunities
- I will meet with you in an informal 30 min 1:1 meeting each week.
- I will meet with you at least once a year to have a yearly progress report (each January) where we will go over your accomplishments for the year and set out new goals for the coming year.
- I will read and provide feedback on anything you write (grants, manuscripts, reviews, etc.) in a timely manner.
- I will promote your research, introduce you to colleagues, write recommendation letters, and support your future decisions as you move towards your career goal.

### Specific expectations of graduate students (Masters and PhD)

- Develop concepts of your research project with me
- Write your thesis proposal independently
- Apply for appropriate funding opportunities
- Prepare for and attend weekly 1:1s and yearly review meetings with me
- Be proactive with all safety requirements
- Write and submit manuscripts for at least 2 peer-reviewed publications
- Write and finish thesis/dissertation
- Communicate with me if you want to TA beyond the requirements
- Optional but highly encouraged: attend departmental seminars and/or training courses
- Optional but encouraged as you become more senior: mentor undergraduates in the lab

#### Specific expectations of postdoctoral fellows

- Finish all PhD related matters in a timely manner
- Together with me, you will develop project ideas, including independent projects that can be taken with you
- Apply for appropriate funding opportunities
- Prepare for weekly 1:1s and yearly review meetings with me
- Be proactive with all safety requirements
- Write and submit manuscripts for at least 2 peer-reviewed publications
- Contracts are renewed on a yearly basis
- Communicate career goals with me
- Optional but highly encouraged: attend departmental seminars and/or training courses
- Optional but encouraged: mentor undergraduates in the lab

### Specific expectations of undergrads

- Decide and agree upon a defined schedule for work hours in the lab
- Arrive on time to all lab meetings and designated lab hours
- Be proactive with all safety requirements
- Start and end the week by meeting with specific mentor to outline the goals of the week, and discuss progress and plan the next week
- Prepare for weekly 1:1s either with me or direct lab mentor

### Specific expectations of research staff

- Carry out lab-specific duties as well as an independent project
- Define lab specific duties with the PI
- Develop concepts of your research project with me
- Prepare for and attend weekly 1:1s and yearly review meetings with me

- Be proactive with all safety requirements
  Write and submit manuscripts of your research project
  Communicate career goals with me
  Optional but encouraged: mentor undergraduates in the lab